

ZOILA ROSSELLI Cotton

By THELMA HARTLEY*

(1 Text figure)

Zoila rosselli was originally described in 1948. In this article Mr. Cotton said the only specimens known were six taken by Mr. Rossell at Fremantle, Western Australia, with a possible seventh from Cottesloe, a beach just out of Perth and very near Fremantle. (According to information received by the author from various sources, there would appear to be twelve specimens in existence.)

Four of these shells belonged to Mr. W. R. Steadman, one of which was donated to the Adelaide Museum, which is the holotype specimen figured in five different positions. A broken specimen belonging to the series is also figured to show the interior structure.

In Mr. Cotton's *Remarks* he said: "The species is constant in character, size and shape. Only three distinct species and four sub-species of the primitive cold water cowries belonging to the genus *Zoila* are known, and they are found in Western and South Australia. There are four Tertiary species in the Miocene of Victoria, *Z. consorbrina* McCoy 1877, *Z. platypyga* McCoy 1887, *Z. simplicior* Schilder 1935, and *Z. toxorhyncha* Tate 1890. None of the Tertiary species resembles the recent one here described. Probably *Z. rosselli* is more closely allied to *Z. decipiens* Smith 1880, described from north-Western Australia than to any other species, but it is distinct."

Mr. Cotton points out the fact *Z. rosselli* differs in the flattened base with its spreading and sharply-edged margin and coarse spaced teeth of the columella and outer lip. Curiously, *Z. rosselli* has the general shape of *Siphocypraea mus* Linne 1758 Mediterranean, and of *Bernaya teulerei* Cazenavette 1846 Arabia, and *Bernaya fultoni* Sowerby 1903 Natal, but these three species have well-rounded bases and *Bernaya* is edentulous. *Siphocypraea* has a complete set of spaced teeth on the margins of the wide aperture, a feature which in some way recalls *Z. rosselli*.

Mr. Rossell took the shells from a beach near North Wharf just beyond the wall where all sorts of rubbish came ashore. The bucket dredges dumped their contents straight out to sea opposite this beach, which means the shells may have come from the bottom of the harbour.

Mr. Rossell wrote: "I remember small stones, some with shells such as *Turbo setosus* stuck in them in a partly fossilised state. . . . I often picked up immature *C. scotti* on this little beach, but of course *scotti* were, and some actually had the remains of the animals in. . . . If I remember, the time would be about October, after the equinoctial blows of September. . . . it must be a long time since I took them, at least 30 years ago. I remember it very well, and the dorsum was pale brown, somewhat marked with tiny scratches and cleaned at once with the application of hydro-chloric acid. I imagined then that it effected an improvement in the shell's appearance, but I was just beginning to collect things and, had it been recently, I would have known better."

These shells, taken by Mr. Rossell over 40 years ago, have never been duplicated by any collector, and have changed hands only rarely. Although in Mr. Cotton's opinion, the specimens were dead when taken, and in spite of the fact acid was used on the dorsum, they remain beautiful specimens. The caramel-brown of the base, with darker brown spots showing through; the wavy left margin edge and the sharply humped dorsum all create an attractive effect. A truly outstanding shell.

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At present these twelve shells are in the following collections: The South Australian Museum in Adelaide has the holotype; the National Museum of Victoria has, so I have been given to understand, one specimen; according to information received, the Cottesloe specimen is in the Australian Museum of Sydney; these is one *rosselli* in the private collection of Lt.-Col. R. J. Griffiths of Melbourne (this is the broken specimen pictured below, showing the pearly white interior); two specimens collected at Leighton Beach by Mr. Russell are in the Western Australian Museum, along with two specimens "presented by West, unknown locality and unknown collecting data, but may have been collected by Russell"; one specimen is in the West Australian Naturalists' Club, collected by G. Kendrick at Leighton in 1955; one is in a private collection in the United States, having been sold recently by a Sydney shell dealer; and there are two *Z. rosselli* in the Hartley collection.



Text figure 1.

Zoila rosselli Cotton 1948

- Fig. 1—*Zoila rosselli* ventral, holotype.
- Fig. 2—*Zoila rosselli* dorsal, holotype.
- Fig. 3—*Zoila rosselli* anterior, holotype.
- Fig. 4—*Zoila rosselli* posterior, holotype.
- Fig. 5—*Zoila rosselli* dorsal aspect of broken specimen showing interior.
- Fig. 6—*Zoila rosselli* lateral, holotype.